

ETERNAL CAREER CLASSES

SUBJECT :

CLASS : XII

FULL MARKS : 40

NAME :

BOARD TEST : 24

DATE : 4.01.2025

SECTION - A

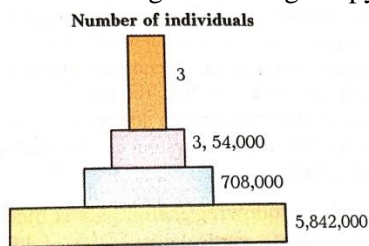
Single answer type question. Attempt any Fourteen question :-

Marks : $1 \times 14 = 14$

1. An ecosystem contains
 - (a) green plants and animals
 - (b) green plants and decomposers
 - (c) green plants, animals, decomposers and abiotic
 - (d) producers and consumers
2. Which of the following is an ecosystem service provided by a natural ecosystem ?
 - (a) Cycling of nutrients
 - (b) Prevention of soil erosion
 - (c) Pollutant absorption and reduction of the threat of global warming
 - (d) all of the above
3. The rate at which solar energy is captured in sugar molecules during photosynthesis is known as
 - (a) gross primary productivity
 - (b) net primary productivity
 - (c) secondary productivity
 - (d) gross secondary productivity
4. Which of the following option correctly display the components of an ecosystem ?
 - (a) Succession, productivity and energy flow
 - (b) Nutrient cycle, ecological interactions and succession
 - (c) Decomposition, ecological interactions and productivity
 - (d) Energy flow, nutrient cycle and decomposition
5. Productivity is the rate of production of biomass expressed in terms of

(i) $(kcal\ m^{-3})\ yr^{-1}$ (ii) $gm^{-1}\ yr^{-1}$ (iii) $gm^{-2}\ yr^{-1}$ (iv) $(kcal\ m^{-2})\ yr^{-1}$

 - (a) (ii) only
 - (b) (iii) only
 - (c) (iii) and (iv)
 - (d) (i) and (iii)
6. Consider the given ecological pyramid and choose the correct option .



- (a) Pyramid of biomass in an aquatic ecosystem
 - (b) Pyramid of number in a grassland ecosystem
 - (c) Pyramid of biomass in a grassland ecosystem
 - (d) Pyramid of energy in an aquatic ecosystem
7. Match the following columns.

	Column I		Column II
A	DFC	1	Vertical distribution of different
B	Trophic level	2	Begin with dead organic matter
C	Stratification	3	Total dried biomass of the living

D	Standing crop	4	Position of an organisms in a food chain
---	---------------	---	--

Codes

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 2 | 4 | 1 | 3 |
| (b) | 3 | 2 | 4 | 1 |
| (c) | 1 | 3 | 4 | 2 |
| (d) | 2 | 3 | 4 | 1 |

8. Match the following columns .

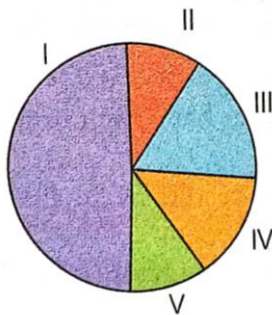
	Column I		Column II
A	Gross primary Productivity	1	Highly resistant to microbial action
B	Detritus	2	Amount of biomass produced per unit area over a time period by plants .
C	Humus	3	Rate of production of organic matter during photosynthesis
D	Primary production	4	Remains of dead plants and animals

Codes

- | | | | | |
|-----|---|---|---|---|
| | A | B | C | D |
| (a) | 2 | 4 | 1 | 3 |
| (b) | 2 | 1 | 4 | 3 |
| (c) | 3 | 4 | 1 | 2 |
| (d) | 3 | 1 | 4 | 2 |

9. The terms ecosystem was coined by
 (a) AG Tansley (b) E . Haeckel (c) E Warming (d) EP Odum
10. Which of the following ecological pyramids is generally inverted ?
 (a) Pyramid of energy
 (b) Pyramid of biomass in a forest
 (c) Pyramid of biomass in a sea
 (d) Pyramid of numbers in grassland
11. Which of the following match – pair is incorrect ?
 (a) Species of ants on earth – 20, 000
 (b) Species of orchids on earth – 10, 000
 (c) Species on fishes on earth – 28, 000
 (d) Species of beetles on earth – 3, 00, 000
12. Which of the following countries has has the highest biodiversity ?
 (a) Brazil (b) South Africa
 (c) Russia (d) India
13. Which of the following match pair is incorrect w.r.t recent extinction of species ?
 (a) thylacine – America
 (b) Steller's - Russia
 (c) Dodo – Mauritius
 (d) Quagga – Africa
14. Introduction of Nile Perch in Lake Victoria of South Africa resulted in

- (a) excessive growth of water weeds
 (b) elimination of water weeds
 (c) elimination of many species of cichlid fish
 (d) excessive growth of cichlid fish
15. Which of the following is not a cause for loss of biodiversity ?
 (a) Destruction of habitat
 (b) Invasion by alien species
 (c) Keeping animals in zoological parks
 (d) Overexploitation of natural resources
16. Which of the following match pair are incorrect ?
 (a) Aravalli hills – Rajasthan
 (b) Westrn ghats – Maharashtra
 (c) Sarguja area – Madhya Pradesh
 (d) Jaintia hills – Assam
17. Identify the incorrect match pair .
 (a) No of national parks in India – 90
 (b) No of wildlife sanctuaries in India – 484
 (c) No of hotspots in India – 3
 (d) No of biosphere reserves in India – 14
18. Which of the following option correctly represent the increasing order of species diversity ?
 (a) Orchids < Fishes < Beetles
 (b) Fishes < Beetles < Orchids
 (c) Fishes < Orchids < Beetles
 (d) Beetles < Fishes < Orchids
19. Choose the correct match pair from the given option .
 (a) EPA - Environmental Pollution Agency
 (b) UNEP – United Nations Environmental Policy
 (c) IPCC – International Panel for Climate Change
 (d) IUCN – International Union for Conservation of Nature and Natural Resources
20. Consider the diagram and choose the correct answer .



	(I)	(II)	(III)	(IV)	(V)
a	Fishes	Mammals	Birds	Reptiles	Amphibians
b	Fishes	Amphibians	Birds	Mammals	Reptiles
c	Birds	Mammals	Amphibians	Reptiles	Fishes
d	Birds	Amphibians	Reptiles	Mammals	Fishes

SECTION - B

Short answer type question. Attempt any two question :-

Marks : $2 \times 3 = 6$

21. Define sacred groves. What is their role in the conservation of biodiversity?
22. Is more solar energy available in the tropics? Justify your answer.
23. Why is the number of trophic levels in an ecosystem limited?
24. Why does primary productivity vary in different ecosystems?

Long answer type question. Attempt any four question :-

Marks : $4 \times 5 = 20$

25. Name the three important components of biodiversity.
26. What are sacred groves? What is their role in conservation?
27. How is biodiversity important for ecosystem functioning?
28. Give an account of energy flow in an ecosystem
29. Write important features of a sedimentary cycle in an ecosystem
30. Describe the components of an ecosystem